REMARKS/ARGUMENTS

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-20 are pending in the application.

35 U.S.C. § 112 Rejection

Claims 1-20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter.

The Examiner states that the term "rotation angle" is unclear in claims 1, 10, and 19. Additionally the Examiner states that Claims 2-3 are indefinite since allegedly the limitations are inconsistent with independent claim 1 and the phrase "varying the radius of curvature or choosing a tilt angle" is unclear, where the term "tilt angle" is allegedly undefined. The Examiner states that for claims 3-5 the term "plane" should be replaced with the term "surface." Finally the Examiner states that it is unclear how an angle or radius of curvature is variable in a solid structural lens element, as allegedly stated in claims 10 and 11. Applicant respectfully traverses each of these rejections for at least the following reasons.

The specification states, with regard to rotation and tilting angles:

> [0030] In further exemplary embodiments the gap images can be blurred by effectively rotating or tilting lenslets in lenslet arrays. Rotating refers to rotating a lenslet in a plane of the lenslet array a rotation angle. Tilting refers to rotating the lenslet out of such a plane a tilting angle. The rotation angle and the tilting angle can vary in accordance to exemplary embodiments. For example, in at least one exemplary embodiment the rotation angle is between 5 and 55 degrees. The rotation angle and the tilting angle can vary depending upon the arrangement of pixels and subpixels and the gap spaces associated with the arrangements. A rotation angle greater than 0 degrees rotates an associated pixel image. The rotation of pixel images result in partial overlaps of pixel images blurring gap images. A tilting angle tilts an associated pixel image at an observation plane overlapping pixel images reducing gap images.
>
> [0031] A lenslet array 500 in accordance with at least one exemplary embodiment is shown in Figure 5A, where a first axis 520 is parallel to a line corresponding to a center of curvature of a face of the lenslet 530, and the second axis 510 bisects a projection of the lenslet. A first vector and a

> second vector corresponding to the first axis 520 and second axis 510 respectively intersect at an intersect angle. The intersect angle can have a projection corresponding to the rotation angle and another projection corresponding to the tilting angle. Figure 5B shows the lenslet 530 corresponding to the cross section A-A of Figure 5A. The cross section shows a lenslet having a radius of curvature 540, which can be varied to blur gaps images. The lenslet can be rotated with respect to a plane in the lenslet array 500 with a radius of curvature 540 chosen so that the rotation rotates pixel images to overlap and the radius of curvature blurs pixel images resulting in blurred gap images. Although both methods can be used concurrently to blur gap images, either can be used independently or in different degrees with the other method. In addition, the method of tilting can be employed independently or in combination with the other two methods.

In keeping with the discussion stated above and using Figure 5A as a reference, clearly "rotating the lens" would refer to a rotation in the plane of the paper in Figure 5A, whereas a tilt of the lens would be a rotation out of the plane of the paper of Figure 5A. In Figure 5A the first axis 520 and the second axis 510 can lie outside the paper plane. If for argument sake the first axis lies in the paper plane of Figure 5A and the second axis 510 also lies in the paper plane of Figure 5A, then the intersect angle, in this example, would correspond to a rotation angle, as clearly described in paragraphs 30 and 31. Likewise a "tilt angle" would be tilted out of the plane. Therefore, the terms "rotation angle" and "tilt angle" are clear in light of the specification.

Furthermore, the limitations of claims 2 and 3 are not inconsistent with the limitations of claim 1. There is clearly a difference between a rotation angle, varying the radius of curvature of the lens, and a tilt angle, as discussed above.

Additionally, replacing the term "surface" for a "plane" in claim 3, 4, and 5 would be incorrect with the intended meaning. The "plane" of a lenticular array referred to, for example with regard to Figure 5A, is clearly not the "surface" of the lenticular array, which is composed of curved lens surfaces, and thus any tilt angle would have no real reference point of rotation out of the "plane." Claim 3, from which claims 4 and 5 depend, specifically defines the term "plane" as:

> ... where the tilt angle is a rotation of a lenslet into or out of the plane of the lenslet array, where the plane is defined by at least one of the tangents to the first axis of the lenslets and the centers of the lenslets...(Claim 3)

For example, with reference to Figure 5A, if the second row of lenslets are set lower than the first row of lenslets, then in at least one exemplary embodiment a plane can intersect the centers of the lenslets and a tangent to the first axis, which in the example discussed would have the plane lying out of, but intersecting the plane of the paper of Figure 5A. Thus "surface" should not replace "plane" as defined and discussed in the specification and claims. Additionally the term "plane" in accordance to the intended meaning and as described in the specification can be curved, as stated in Claims 3 and 4. In the interest of clarification only Applicants have replaced "plane" with "reference surface" and amended claim 3 to better define the intended meaning of the "reference surface."

With reference to claims 10 and 11, the Examiner adds the limitation of "solid" to mean non flexible. The term "solid" is not present in claims 10 and 11, but regardless there are materials that result in a flexible solid. Applicant has stated in the specification that the lenslets can be manufactured by various techniques (e.g. molding, para. 32) and one of ordinary skill would know that the lenslets can be made of various materials. Additionally, there are various techniques known to one of ordinary skill to make the first angle and radius of curvature variable. For example the material the lenslets are made of could be flexible, and the flexing of the lenslet array would make either the first angle or the radius of curvature variable.

Accordingly Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 1-20 under 35 U.S.C. § 112.

35 U.S.C. § 102 Rejection

Claims 1, 6-9, 12-16, and 18-20 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Van Berkel et al. (U.S. Patent No. 6,118,584).

Applicant respectfully traverses each of these rejections for at least the following reasons.

The Examiner relies on Van Berkel, to allegedly show, suggest, or teach the features of independent claims 1, 13, and 19. Applicant respectfully disagrees with the Examiner's assessment of Van Berkel and has amended claims 1, 13, and 19 for clarity sake only.

Amended claims 1, 13, and 19 state:

> ...wherein each lenslet has at least a first and a second axis, where the first axis is parallel to a line corresponding to a center of curvature of a face of the lenslet, and the second axis bisects a projection of the lenslet, where vectors corresponding to each axis intersect at a non-zero first angle,...(Claims 1, 13, and 19)

Van Berkel, clearly illustrates lenslets 16 where the first and second axis are parallel, from the top to bottom of the page (Van Berkel, Figures 1, 2A, 2B, 35, 7A, 7B, 8, and 9). In Van Berkel, the center of curvature of the lenslets of all of the mentioned figures is from the top to bottom of the page, hence the first axis is from top to bottom. Likewise the projection of the lenslets is bisected by a second axis that also is parallel to a line going from top to bottom, and thus parallel to the first axis. Therefore, Van Berkel fails to show an element of independent claims 1, 13, and 19, "a non-zero first angle."

As stated in MPEP § 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The references applied by the Examiner neither expressly nor inherently describes every feature of Applicant's claimed combinations as detailed in the foregoing arguments. Therefore since Van Berkel fails to show a feature of independent claims 1, 13, and 19, as discussed above, these claims are allowable over the references. Additionally, claims 6-9, 12,

14-16, 18, and 20, which depend directly or indirectly upon one of the claims 1, 13, and 19, are allowable for the same reasons claims 1, 13, and 19 are allowable.

Accordingly Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 1, 6-9, 12-16, and 18-20 under 35 U.S.C. § 102.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, at the telephone number listed below.

Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 50-3136 and please credit any excess fees to such deposit account.

Respectfully submitted,
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